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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,228	01/21/2004	Kia Silverbrook	WAL05US	2203

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AUSTRALIA

EXAMINER	
COLILLA, DANIEL JAMES	
ART UNIT	**PAPER NUMBER**
2854	

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/760,228	SILVERBROOK ET AL.	
	Examiner	Art Unit	
	Daniel J. Colilla	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/12/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 2, 4-6, 8, 14 and 16 are objected to because of the following informalities:

In claim 2, line 3, "an end plate" appears to be a double recitation of that which has been recited in claim 1.

In claim 4, lines 3-4, "the location of each cutting disk" has no antecedent basis in the claims. A "cutting disk" has not previously been recited in the claims.

In claim 5, lines 3-4, "the location of each cutting disk" has no proper antecedent basis in the claims. A "cutting disk" has not yet been recited in the claims.

In claim 5, line 5, "an arrangement of cutting disks" appears to be a double recitation of the "slitters" recited in claim 1.

In claim 5, lines 6-7, the phrase, "when the selected shaft is rotated into a cutting position" is indefinite since no previous language in this line of claims recites rotating a selected shaft. Additionally, "the selected shaft" has no antecedent basis in the claims.

In claim 6, the phrase, "each slitting shaft has a different arrangement" implies that there is more than one slitting shaft. However, applicant has not positively recited that there is more than one slitting shaft. Instead applicant has recited one slitting shaft with the possibility of more than one.

In claim 8, line 3, "the blade" has no antecedent basis in the claims.

In claim 14, "a pair of exit rollers in proximity, at least one of the exit rollers being powered" is a double recitation of that which is recited in claim 13.

In claim 16, line 2, "an end plate" appears to be a double recitation of that which has already been recited in claim 1.

Appropriate correction is required.

2. Claims 7 and 17-34, 38 and 42-46 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

In claim 7, applicant has not recited any further structure of the slitting mechanism. Instead applicant has functionally recited how the slitting mechanism is desired to be used. The recitation of method steps of using an apparatus in an apparatus claim holds no patentable weight.

Claims 17-34, 38 and 42-46 are drawn to a slitting mechanism. However, these claims do not further limit the structure of the slitting mechanism but instead recite structure of the environment in which applicant intends to use the slitting mechanism. Since no language further limiting the slitting mechanism these claims fail to further limit the parent claim 1.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 35-37, 39-41 and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 35-37, 39-41 and 47, the statutory class of invention being claimed is unclear. The preambles begin by reciting "a slitting mechanism as claimed in claim 1" which would suggest that the claim is directed towards an apparatus. But then the claims continue with the phrase (or a similar phrase), "adapted for use in a method . . .comprising the steps of:" and the body of each respective claim recites a series of method steps. This would suggest that applicant is attempting to recite a method claim.

For purposes of prior art examination, these claims will be interpreted as apparatus claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 7, and 17-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Coburn (US 4,142,455).

With respect to claim 1, Coburn discloses a slitting mechanism including a chassis with end plates 12,13 and a transverse portion 94 as shown in Figures 2 and 4 of Coburn. Further disclosed are rotating slitting shafts 32,34,36,38 extending between the end plates 12,13, each shaft having one or more slitters (Coburn, col. 2, lines 53-55). A blade inherently has a cutting

edge which performs the cutting function. Figure 1 of Coburn shows that the slitting mechanism is provided with wheels 14 allowing the slitting mechanism to move so that it selectively can enter or not enter a path followed by a web 18.

With respect to claim 2, Coburn further discloses a pair of rotating end brackets 20 (Coburn, col. 2, lines 17-37) between which extend the slitting shafts 32,34. Coburn also discloses a second pair of rotating end brackets 22 between which extend the slitting shafts 36,38. The brackets are rotated by a motor 62 which is supported by a bracket 60 which is cantilevered off of end plate 12 as shown in Figure 2 of Coburn.

With respect to claim 3, Coburn discloses that the slitting shafts 36,38 are arranged around a central support shaft 30 which are all carried between the brackets 22. Similarly, slitting shafts 32,34 are arranged around a central support shaft 28 which are all carried between the brackets 20.

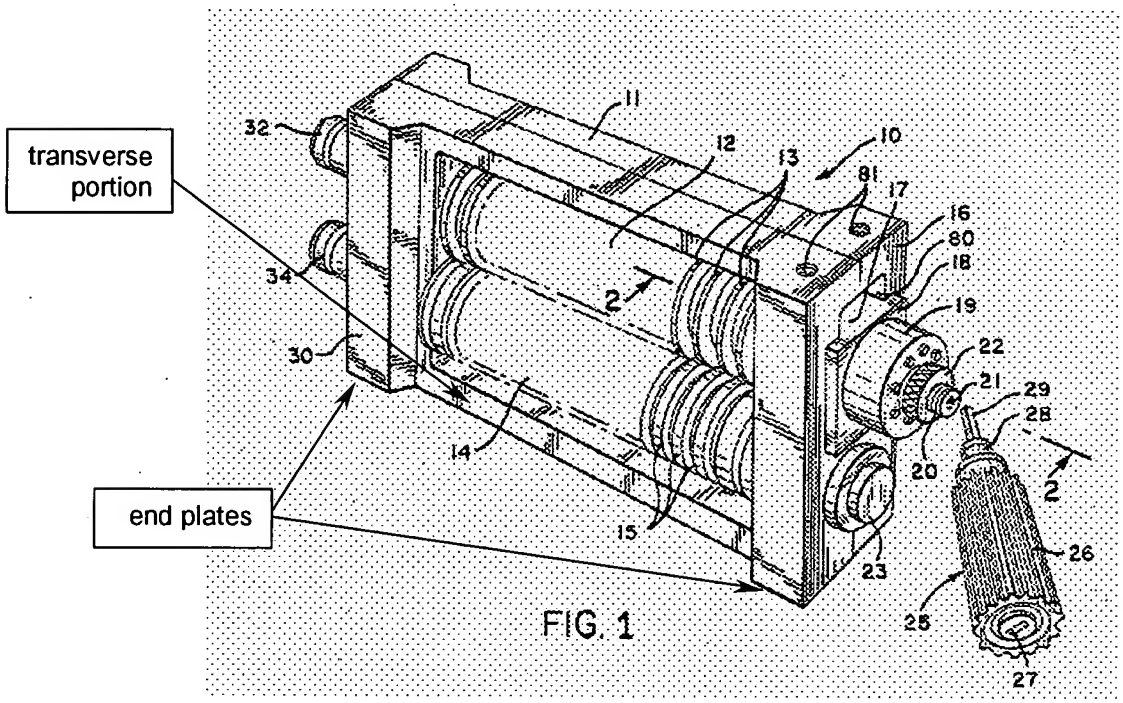
Since applicant has not recited any further structure of the slitting mechanism in claim 7, it is rejected along with its parent claim, claim 1.

With respect to claims 17-34, 38 and 42-46, applicant has not recited any further structure of the slitting mechanism in these claims. Instead applicant has recited structure of other apparatus to be used with the slitting mechanism. Since the slitting mechanism has not been further limited in these claims, they are rejected along with their parent claim, claim 1.

With respect to claims 35-37, 39-41 and 47, these claims only recite a process of how the slitting mechanism is to be used. Since this is an apparatus claim the method of how the slitting mechanism is to be used holds no patentable weight. Therefore, these claims are rejected along with their parent claim, claim 1.

7. Claims 1 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Nielsen et al. (US 4,885,964).

With respect to claim 1, Nielsen et al. discloses a slitting mechanism including a chassis having end plates and a transverse portion as shown below in the Figure taken from Figure 1 of Nielsen et al."



Nielsen et al. further discloses a slitting shaft 12 having a plurality of slitters 13 with cutting edges as shown in Figure 2 of Nielsen et al. By moving the slitting mechanism, a user may selectively engage the mechanism to enter or not enter a path followed by a web.

With respect to claims 4-5, Nielsen et al. further discloses a guide roller 14,15 which extends between the end plates and under the path of a media. The guide roller has a number of circumferential grooves between the outer edges of discs 15 as shown in Figures 2 and 3 of

Nielsen et al. The shaft is positioned such that each cutting disk 13 enters a groove as shown in Figures 2-3.

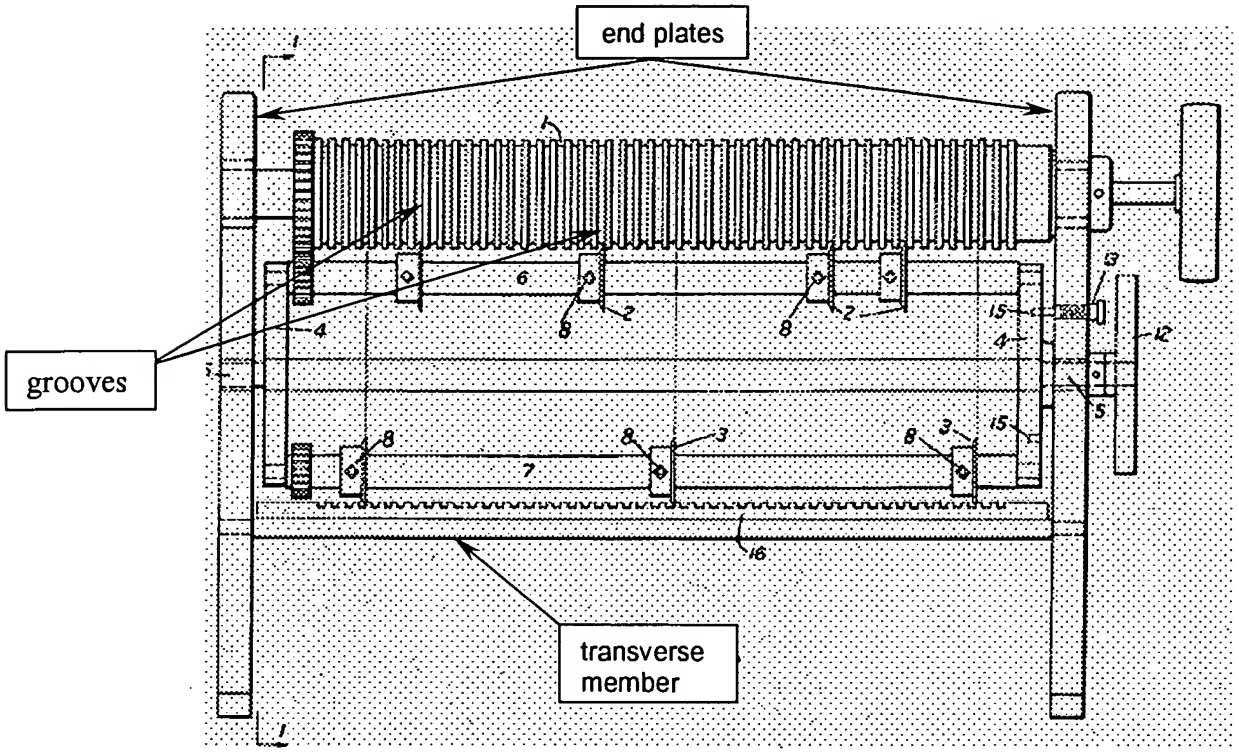
8. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Adami (US Re. 35,345).

With respect to claim 1 Adami discloses a slitting mechanism including a chassis having end plates 1 and a transverse portion 5 as shown in Figure 1 of Adami. Further disclosed are rotating slitting shafts 32,33,34,35 extending between the end plates 1 each having one or more slitters 37,38,39,40 (some of which are shown in Figure 7 of Adami), each slitter having a cutting edge. Figure 1 of Adami shows that the slitting mechanism is provided with wheels 7 allowing the slitting mechanism to move so that it selectively can enter or not enter a path followed by a web C.

With respect to claim 2, Adami discloses end brackets 17 between which the slitting shafts 32,33,34,35 extend; the brackets are rotated by a motor 226 through gear 53 and cambox 22 as shown in Figure 12 of Adami (Adami, col. 9, lines 41-48). The motor is carried by an end plate 1 also shown in Figure 12.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Cameron et al. (US 1,570,940).

With respect to claim 1, Cameron et al. discloses a slitting mechanism including a chassis having end plates and a transverse portion as shown below in the Figure taken from Figure 2 of Cameron et al.:



Cameron et al. further discloses rotating slitting shafts 6 and 7 extending between the end plates, each shaft having one or more slitters 2 and 3 respectively. Each of the slitters have cutting edges as shown above. The slitting mechanism can be selectively engageable to either enter or not enter a web path if a user so desires to move the above mechanism into or out of the path of a web.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron et al. (US 1,570,940).

With respect to claim 5, Cameron et al. discloses the slitting mechanism, as mentioned above with respect to claim 1, except that Cameron et al. does not disclose that the guide roller extends under the path of the media. Cameron et al. discloses a guide roller 1 which extends between the end plates as shown above, however, the guide roller 1 is positioned above the path of the media (not shown). It has been established that the mere reversal of parts is an obvious expedient (see MPEP § 2144.04, part VI, A). In this case the reversal of the guide roller 1 and the cutting assembly 4,6,7 would have been obvious and would allow the guide roller 1 to be located under the path of the media being cut. The guide roller includes a number of circumferential grooves, a groove corresponding to the location of each cutting disk as shown above.

With respect to claim 6, Cameron et al. discloses two slitting shafts 6 and 7, each with a different arrangement of cutting disks 2 and 3 respectively as shown in Figure 2 of Cameron et al.

12. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coburn (US 4,142,455) as applied to claims 1-3, 7 and 17-47 above, and further in view of Carter (EP 594306).

With respect to claim 12, Coburn discloses the claimed slitting mechanism except for the pair of entry rollers. However, Carter teaches a slitting mechanism with a pair of entry rollers 41,42 (left-most pair) that are powered by a motor M as shown in Figures 5-6 of Carter. It would have been obvious to combine the teaching of Carter with the slitting mechanism disclosed by

Coburn for the advantage of individually adjustable slitting blades positionable anywhere along the width of the paper (Carter, col. 1, lines 42-52).

With respect to claim 13, Carter teaches exit rollers 41,42 (right-most pair) as shown in Figure 5 of Carter. These rollers are also powered by motor M as shown in Figure 6 of Carter.

With respect to claim 14, Carter teaches exit rollers 41,42 as mentioned above but it is not known to the examiner if the motor M is carried by the chassis. However, Coburn discloses a motor 62 that is carried by a chassis.

13. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coburn (US 4,142,455) in view of Carter (EP 594306), as applied to claims 12-14 above, and further in view of Yamaguchi (US 20030070753).

With respect to claim 15, Coburn in view of Carter discloses the claimed slitting mechanism except for the belt which passes around one each of the entry and exit rollers. Carter teaches a system of gears and belts for driving the entry and exit rollers 41,42 with a single motor M. Yamaguchi teaches entry and exit roller pairs 82a,82b and 83a,83b respectively. The rollers 82a and 83a are driven by a belt (not shown) as stated in paragraph [0122] lines 1-6 of Yamaguchi. It would have been obvious to modify Carter in view of Coburn to include the belt taught by Yamaguchi because belts and gears are well-known basic mechanical expedients that are mechanical equivalents of one another. It is also noted that a motor inherently has a rotating shaft that is used to transmit the rotary power generated by the motor.

With respect to claim 16, it is not known to the examiner if Yamaguchi teaches a belt that is external to an end plate, however, Carter teaches a power transmitting belt external to an end

plate 105 as shown in Figure 6 of Carter. It would have been obvious to combine this teaching of Carter with the slitting mechanism disclosed by Coburn in view of Carter and Yamaguchi for the advantage or preventing interference of the power transmission belt with the moving parts of the slitting mechanism.

14. Claims 8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coburn (US 4,142,455) as applied to claims 1-3, 7 and 17-47 above, and further in view of Kwasny et al. (US2002/0118990) and Kawakami (JP 2000-15596).

With respect to claim 8, Coburn discloses the claimed slitting mechanism except for the transverse cutter. However, Kwasny et al. teaches a slitting mechanism 16 and a transverse cutter 14 as shown in Figures 1-2 of Kwasny et al. the cutter 14 extends between end plates of the housing as shown in Figure 1. It would have been obvious to combine the teaching of Kwasny et al. with the slitting mechanism disclosed by Coburn for the advantage of cutting in two directions, perpendicular to one another, so that a desired size of media can be achieved as shown in Figure 1A of Kwasny et al. It is not known to the examiner if the cutter 14 performs a cutting motion which begins on one side of the web and finishes on an opposite side of the web. However, Kawakami teaches a transverse cutter that begins cutting at one side and finishes at the other side as shown in Figure 4 of Kawakami. It would have been obvious to combine the teaching of Kawakami with the slitting mechanism disclosed by Coburn for the advantage of cutting without moving the media being cut by use of pressing plate 68 (see lines 10-13 of the solution portion of the English abstract of Kawakami).

With respect to claims 10-11, each end of the blade is driven and carried eccentrically by a rotating member 18 that rotates as shown in Figures 1 and 4 (see paragraph [0033] of the machine translation of Kawakami.

15. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coburn (US 4,142,455) in view of Kwasny et al. (US2002/0118990) and Kawakami (JP 2000-15596), as applied to claims 8 and 10-11 above, and further in view of Scott (US 2003/0033922).

Coburn in view of Kwasny et al. and Kawakami discloses the claimed slitting mechanism except for the motor being supported by an end plate. Kawakami teaches a motor 15 coupled to a blade 25 that is supported by a back plate 3 as shown in Figure 1 of Kawakami. However, Scott teaches a motor 28 coupled to a blade 24 that is supported by an end plate as shown in Figures 4-5 of Scott. It has been established that the mere rearrangement of parts is an obvious matter of design choice (see MPEP § 2144.04, part VI, C). It would have been obvious to move the motor from the back plate to the end plate so that the motor attachment screws are on the same side as numerous other attachment screws 5 and 29 as shown in Figure 1 of Kawakami, thus expediting the manufacture of the apparatus.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (571) 272-2157. The examiner can normally be reached Mon.-Thur. between 7:30 am and 5:00 pm. Faxes regarding this application can be sent to (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (571) 272-2168. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 7, 2005

Daniel J. Colilla
Primary Examiner
Art Unit 2854